

Claims

1. A service providing apparatus characterized by comprising:

an operation sensor that judges whether a user has operated an access point in an object of operation by the user;

an access sensor that judges whether the user is present in a near area where the user could be present when the user operates the access point; and

control means that controls an operation of the service providing apparatus, and in that

the control means includes:

ID authentication means that performs ID authentication for the user on the basis of results of the judgment of the access sensor and the operation sensor; and

external processing determining means that causes an external apparatus to execute a service corresponding to a result of the ID authentication of the ID authentication means.

2. A service providing apparatus according to claim 1, characterized in that

the object of operation by the user is a door for entering the house,

the access point is a door knob of the door and,

on the other hand, the operation sensor detects an operation of a key, which is used for unlocking the door, unlocking the door.

3. A service providing apparatus according to claim 1, characterized in that

the object of operation by the user is a door for entering the house,

the access point is a door knob of the door and,

on the other hand, the operation sensor is a pressure sensor that detects, when a key used for unlocking the door is inserted into a keyhole of the door, a force generated in a direction of the key from the keyhole.

4. A service providing apparatus according to claim 1, characterized in that

the object of operation by the user is a door for entering the house,

the access point is a door knob of the door and,

on the other hand, the operation sensor is a pressure torque sensor that detects, when a key used for unlocking the door is inserted into a keyhole and rotated, torque generated in the key.

5. A service providing apparatus according to any one of claims 1 to 4, characterized in that

the object of operation by the user is a door for entering the house,

the access point is a door knob of the door and,

on the other hand, the operation sensor includes:

a coil provided in the door knob;

magnetic field generating means that generates an induction field with the coil; and

detecting means that detects a magnetic force change in the induction field generated by the magnetic field generating means.

6. A service providing apparatus according to any one of claims 1 to 5, characterized by comprising radio communication means that is capable of switching width of an area, in which communication is possible, by switching an output of a radio wave used for communication, and in that

the ID authentication means performs ID authentication for the user by judging whether ID information acquired from an ID authentication terminal carried by a user by performing narrow area radio communication using the ID authentication terminal and the radio communication means is included in permission ID information recorded in the service providing apparatus and, on the other hand, when it is impossible to acquire proper ID information via the radio communication means, transmits information indicating that it is impossible to acquire proper ID information to the external apparatus by performing wide area radio communication using the radio communication means.

7. A service providing program, characterized by causing a computer to function as the control means in the service providing apparatus according to any one of claims 1 to 6.

8. A computer-readable recording medium, characterized by having recorded therein the service providing program according to claim 7.

9. A service providing method, characterized by comprising:

a first step of judging, with an operation sensor of a service providing apparatus, whether a user has operated an access point in an object of operation by the user;

a second step of performing, with ID authentication means of the service providing apparatus, ID authentication for the user based on a result of the judgment of the operation sensor; and

a third step of causing, with external processing determining means of the service providing apparatus, an external apparatus to execute a service corresponding to a result of the ID authentication of the ID authentication means.

10. A key unit, characterized by comprising:

a key section that is inserted into a keyhole of a door;

recording medium that records ID information of a user;

an operation sensor that detects that the key section is inserted into the keyhole of the door; and

ID information transmitting means that transmits the ID information of the user from the recording means to ID authentication means on the outside that performs ID authentication for the user based on the result of detection by the operation sensor.

11. A key unit according to claim 10, characterized by comprising display means that acquires, from the ID authentication means, at least one of abnormality history information indicating time when it is highly likely that illegal intrusion into a house was committed and resident information indicating a person present in the house and displays the abnormality history information or the resident information, the abnormality history information and the resident information being created on the basis of a result of the ID authentication performed by the ID authentication means.